Geospatial Data Product Delivery with UM MapServer

Dr. Thomas E. Burk
Department of Forest Resources
University of Minnesota
MapServer is a collection of software that is used to put together web mapping applications in a particular way. When built you have:

- C library (`libmap.a/.dll`) and API
- CGI interface (`mapserv`)
- Utility programs for automating map components
- Utility programs for manipulating GIS data
- Various flavors of a scripting API called `MapScript`
MapServer History

- 1994 - NASA sponsors ForNet
- 1995 - C program -> ArcPlot AML
- 1997 - shapelib released
- 1999 - NASA sponsors TerraSIP
- 2000 - MapServer 3.0 release
- 2003 - MapServer 4.0 release
- 2007 - MapServer 5.0 release
MapServer License

- Basically MIT/X11
- Give credit where credit is due but no warranty
- Theory was that a liberal license leads to adoption
- Takes a positive view of human nature
MapServer Present

- 5.2 is the current version
  - 5.4 actively being developed
- 10+ developers worldwide
- 2,200+ mailing list subscribers
- ?????? users
- Part of OSGeo Foundation
MapServer Features

- Simple, robust and fast
- Map and map component rendering, feature query
- Support for dozens of GIS data formats including spatial RDMS
- Pragmatic support for most OGC web service specifications
How MapServer Works

web server

MapServer CGI

HTTP

template files
map files
spatial data

MapServer application